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10 SEP 11 2000

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**INVENTION DISCLOSURE FORM**

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**IPD SAN DIEGO***Note: Detailed instructions for completing this form can be found in Appendix V of Sony's Patent Guide for Engineers and Inventors.***I. IDENTIFICATION**IPD Case #: **50P4426**  
(IPD use only)

## 1a. Short Descriptive Title of the Invention:

INTERACTIVE T.V.

## 1b. Short Summary of the Invention:

A TELEVISION HAVING A VIRTUAL CHANNEL EXTENDED CHANNEL CAPABILITY, AND CAPABLE OF RECORDING AND UPLOADING USER PREFERENCES TO BROADCAST VIDEO, & VC CHANNEL, PROMPTS.

## 2. Name of Responsible Patent Coordinator (if any):

Business Address:

Business Phone/Fax:

Business Email Address:

## 3. Identify all persons who contributed to the present invention including persons from other Sony Divisions, Sony Japan and Outside Companies. Final determination of inventorship is a legal question which will be resolved at a later time.

(1)

Full Legal Name: MASANIRO NAKANO NAKANOHome Address: 1084 Golden Way, Los Altos, CA 94024Citizenship: Japan (If Japanese, please provide name in Kanji)Business Address (include mail drop): 3300 Zanker Rd., SJ 1A1, SJ, CA 95134Business Phone/Fax: 408-955-5543 1-408-955-5704Business Email Address: nakano@itvd.sel.sony.comDivision / Company / Location: Interactive TV Development / San JoseBudget code: 830-8316 Sony Employee  Intern  Contractor/Consultant  Temp.  Other.Manager's Name: Katsushi MatsuuraBusiness Address: 3300 Zanker Rd., SJ 1A1, SJ, CA 95134Business Phone/Fax: 408-955-5521 1-408-955-5704Business Email Address: matsuura@itvd.sel.sony.com**RECEIVED**

OCT 10 2000

CARLA KRUEGER

Rev 9/99

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*AEG*

2 of \_\_\_\_\_

(1)

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 Sony Employee  Intern  Contractor/Consultant  Temp.  Other:  
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(2)

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 Budget Code:  
 Sony Employee  Intern  Contractor/Consultant  Temp.  Other:  
 Manager's Name: AKIRA SHIMAZU  
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(3)

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 Division / Company / Location: VEA / SEL / SD  
 Budget Code:  
 Sony Employee  Intern  Contractor/Consultant  Temp.  Other:  
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 (Use Additional Inventors sheet if necessary)

3 of \_\_\_\_

**II. BACKGROUND INFORMATION**

1. Do you believe this invention was developed while working under or in the performance of experimental, developmental or research work called for by a Government Contract or upon the understanding that a Government Contract would be awarded?

 NO  YES

2. Has your invention been disclosed to anyone outside of Sony in a speech, exhibit, presentation, product, product manual, report, lecture, trade show, technical article, publication or otherwise?

 NO  YES

3. Is this invention related to any previous Sony Invention Disclosures of which you are aware (made by you or someone else)?

 NO  YES

4. If you responded "YES" to any of questions 1-3, please explain below:

*N/A*

5. Name of product(s) or project(s) for which this invention was developed:

*INTERACTIVE T.V.*

6. When do you expect a product incorporating this invention to be sold, offered for sale or shown to someone outside of Sony? (If a product or prototype has already been sold, offered for sale or shown, please identify the earliest date this happened):

*AUG. 2001*

7. Has a working model of the invention been built and tested (or appropriate software been written)?

NO  YES: If yes, who has witnessed a demonstration, and when?

8. List below any patents, publications, articles, texts, products, etc. which describe technology similar to your invention including reference material which may be useful in understanding the background technology of your invention: (Include a copy of each item to IPD. Please include copies of all bibliographical information.)

*Video TV*

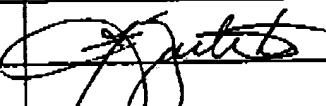
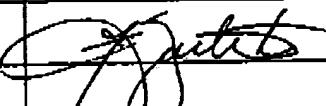
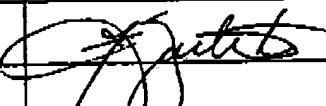
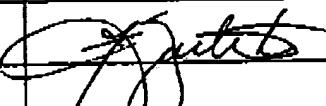
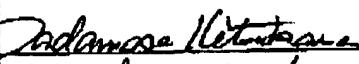
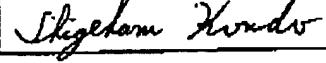
4 of \_\_\_\_\_

**III. DESCRIPTION OF THE INVENTION**

Provide a concise technical description of your invention in the format outlined below on the following pages.

- 1: Explain the problems, issues or needs which led to the invention, and explain how others have addressed these problems, issues or needs.
- 2: Describe your invention in terms of how it solves the problems described in paragraph 1. Specifically identify the new or novel features of your invention. Describe the construction and operation of the invention including drawings (flow charts, schematics, block diagrams, mechanical drawings, photographs, etc.) You may attach documentation in the form of letters, memos, engineering notebook pages, etc. if available, or you may use as many invention disclosure data sheets as necessary. Be sure each page is signed, dated and witnessed.
- 3: If there is more than one way to implement your invention, describe the "Best Mode" or your personal preference as to how to best implement, build, produce, or use your invention (e.g. preferred parts, materials, techniques, etc. which you feel are best in practicing your invention). Each submitter's opinion is important here, even if there is disagreement. Please list anything you think will make the invention better in any way.
- 4: Briefly describe any alternate uses, variations or modifications of your invention, if any, which you contemplate.

See ATTACHED

Signature of Submitter(s)			Read and understood by: Signatures of Witnesses (at least two witnesses preferred)		
	Date			Date	Date
					9/28/00
	9-8-00				
	9/8/00				
	9/8/00				

5 of   Invention Disclosure Data Sheet

Signature of Submitter(s)			Read and understood by: Signatures of Witnesses (at least two witnesses preferred)			
	Date				Date	
	Date				Date	
	Date				Date	
	Date				Date	
	Date				Date	

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## INTERACTIVE T.V.

An interactive television (ITV) for receiving broadcast content includes a virtual channel capability for viewing an extended channel set. The extended channel set comprises web pages, <sup>or the like</sup> downloaded from an MOB/ISP and stored in a virtual channel memory.

In one embodiment (see Fig.), a tuner receives broadcast video. The broadcast video is displayed in accordance with the <sup>broadcast</sup> channel presently selected by the user. A modem receives pre-selected web page data corresponding to at least one web page for download into a virtual channel memory. User demographics info stored in memory is used to align web page content with the user metrics stored in memory.

An electronic program guide includes available broadcast channel and virtual channel information. Selection of a virtual channel results in a CPU retrieving

(2)

the selected virtual channel information from VC memory, generating the virtual channel graphics to be displayed, passing the graphics data through a video/graphics switch (MUX) and display driver (NTSC encoder/formatter) to the display.

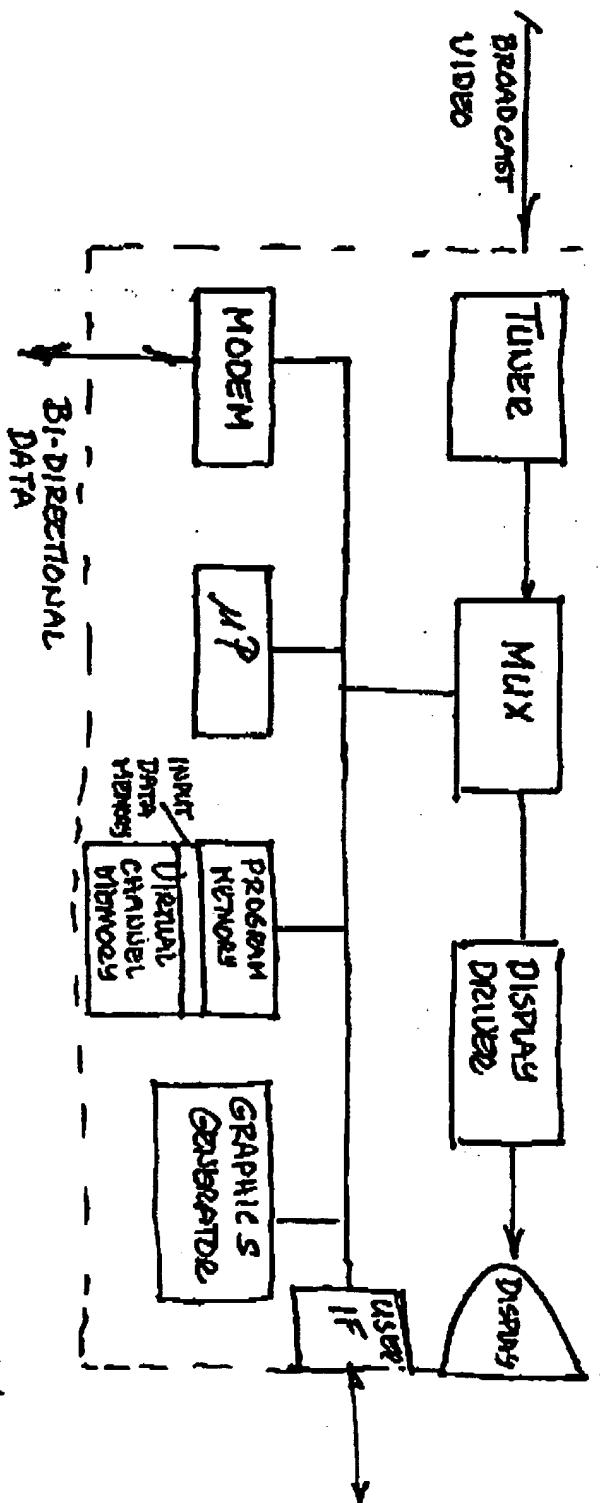
The virtual channel data is downloaded through a modem at pre-determined intervals, on-demand, or "pushed" by the MOD/ISP.

The user may input data into the ITV where it is stored in "input data" memory. This data is uploaded to the MOD/ISP.

In one embodiment, both the broadcast video and web content are received over ~~the~~ a single cable/satellite.

In another embodiment, the modem is in continuous contact with the MOD/ISP and user input is ~~can~~ immediately communicated to the MOD/ISP (i.e. DSL or cable)

## INTERACTIVE TV

J. Bentz  
08/15/00

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Applicant: Nakano	)	Art Unit: 2616
	)	
Serial No.: 09/839,000	)	Examiner: Fish
	)	
Filed: April 21, 2001	)	50P4426
	)	
For: SYSTEM AND METHOD FOR INTERACTIVE	)	June 21, 2005
TELEVISION	)	750 B STREET, Suite 3120
	)	San Diego, CA 92101
	)	

DECLARATION

Commissioner of Patents and Trademarks  
Washington, DC 20231

Dear Sir:

As indicated in the attached letter to inventor Kondo dated March 19, 2001, I transmitted a final version of the present application to Mr. Kondo in Japan. As indicated in the attached letter, also included were five other applications for Mr. Kondo to review and execute. That he diligently reviewed the application, given the number he was tasked to review, executed documents, and returned the documents to us from Japan, and that we then diligently filed the application, is evidenced by the fact that only a month elapsed to when we filed the application, from when we mailed the documents from the U.S. to Japan, the application was reviewed along with Mr. Kondo's other duties, the documents were mailed back to us, and we prepared the application papers for filing and then filed them. Thus, diligence in filing is *prima facie* evidenced from a time prior to March 30, 2001 (the effective date of the Taguchi et al. reference) up to the date the present application was filed.

1168-13.DET

CASE NO.: 50P4426  
Serial No.: 09/839,000  
June 21, 2005  
Page 2

PATENT  
Filed: April 21, 2001

During this period, as a matter of first hand knowledge I declare that the application likewise was transmitted to and reviewed by the other inventors.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code and that such willful, false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

  
John L. Rogitz  
Registration No. 33,549  
Attorney of Record  
750 B Street, Suite 3120  
San Diego, CA 92101  
Telephone: (619) 338-8075

JLR:jg

1168-13.DET

**ROGITZ & ASSOCIATES**  
PATENT, TRADEMARK, AND COPYRIGHT CAUSES

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SAN DIEGO, CALIFORNIA 92101  
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**JUL 01 2005**

March 19, 2001

Shigeharu Kondo  
Product Strategy Office  
BT Development Group  
Broadband Business Center  
Home Network Company  
Sony Corporation  
6-7-35 Kitashinagawa  
Shinagawa-ku, Tokyo  
141-0001 JAPAN

Re: Final Patent Applications for Sony Disclosure Nos.  
50P4368 (Our File No. 1168.006)  
50P4416 (Our File No. 1168.007)  
50P4367 (Our File No. 1168.010)  
50P4369 (Our File No. 1168.012)  
50P4426 (Our File No. 1168.013)  
50P4366 (Our File No. 1168.015)

Dear Mr. Kondo:

Enclosed are the above-referenced final patent applications, along with the formal filing documents.

The patent applications have been reviewed, and the formal filing documents have been signed by your co-inventors. Please review the final applications and filing documents for accuracy. Should all documents prove accurate, please sign and date the declarations and the assignments, and return the filing documents to us (address listed on letterhead), for filing. In no case should the assignments be dated prior to the declarations, however, all documents may be signed on the same day.

It is our understanding, that there is a notary available to witness your signature at the Sony Intellectual Property Department.

Upon our receipt of the signed, dated documents, we will immediately file the applications with the United States Patent and Trademark Office. Time is of the essence and your attention to these matters is greatly appreciated.

DOCS:II

FROM ROGITZ 619 338 8078

(FRI) JUL 1 2005 14:30/ST. 14:23/No. 6833031970 P 28

*Mr. Shigeharu Kondo*  
*March 19, 2001*  
*Page 2*

Please don't hesitate to contact us, should you have questions or comments regarding the enclosed.

Best Regards.

Yours Truly,  
  
John L. Rogitz

JLR:jg

Encs.

cc: Andrea Petit-Clair (w/encs.)  
cc: Frederick J. Zustak (w/encs.)

DOCS.11